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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,606	12/08/2003	Patrick J. Sweeney	029815-0105	4015
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EXAMINER				
STEWART, ALVIN J				
ART UNIT		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/730,606

Applicant(s)

SWEENEY, PATRICK J.

Examiner

Alvin J. Stewart

Art Unit

3774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06/26/0808.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-23 and 42-75 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-23 and 42-75 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/088)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 06/26/08 have been fully considered but they are not persuasive.

Regarding claims 19-23, a new rejection is need it because the Applicant's representative has entered new limitations.

Regarding the rest of the claims, the Examiner believes that the new limitations on the rest of the claims do not place the case in condition for allowance. For example, the limitations disclosing a body having a proximal and distal segments are clearly disclosed in the Dwyer et al reference and the prior art clearly disclose a shaft coupled to the distal segment of the body.

Figure 5 clearly disclose that the shaft is coupled to the distal segment of the body by the help of segment 12. The shaft and the body are not physically abutting each other but they are coupled to each other.

However, the new rejection (US 6,524,342 B1) clearly discloses a shaft physically abutting the body.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 42-48, 50, 52-56, 58-65, 67-69, 73, and 74 are rejected under 35 U.S.C. 102(c) as being anticipated by Dwyer et al US Patent 7,122,056.

Dwyer et al discloses an implant having a body (100) having a central canal (36) and coupled to an articular surface (ball connected to neck element 26, element 26 is connected to insert 12 and the other surface of the insert 12 is connected to the central canal (36) of body (14); a shaft (18) is coupled to the body and the shaft can be removed from the patient after implantation of the prosthesis without removing the body.

Additionally, the device is configured for replacing a hip joint or is capable of being inserted into a shoulder joint. Additionally, the shaft can be called a nail.

Finally, the modular joint of the Dwyer et al reference has a plurality of different shafts (18), see Figs. 1, 5, 6, 12A and 13 that are capable of being replaced in the embodiment of Figure 5. Also, if the shaft (18) of the embodiment of Figure 5 is damaged, the shaft (18) can be replaced by a new shaft.

Regarding claims 50, 51, 56, 57, element 48 is the insert.

Regarding claims 44, 45, 55, 63 and 64, see element 32 in Figure 5.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 49, 51, 57, 66, 70-72 and 75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dwyer et al US Patent 7,122,056.

Dwyer et al discloses the invention substantially as claimed. However, Dwyer et al does not disclose a locking element configured to be screwed into the central canal to lock the first shaft in place and does not disclose a shaft removal device configured to remove the first shaft from the central canal.

Regarding the shaft removal, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Dwyer et al reference by using a delivering tool, such as a pliers, in order to insert or remove the prosthetic shaft.

The Dwyer et al is silent regarding the opening and closing of the access aperture, however, it is an inherent characteristic to open the patient's body in order to replace a damage joint and close the patient's body after the surgeon finished fixing the damaged joint.

Regarding the length of the first and second shafts, Dwyer et al discloses the claimed invention except for the teaching of having different shafts length. It would have been an obvious matter of design choice to have a plurality of modular shafts with different lengths, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Regarding claims 51, 57, and 66, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the taper interlock of element 12 with the taper cavity of element 14 by a threaded cavity with a threaded post in order to make a strong and fixed connection between two structures.

Claims 19-23, 42-51, 52-59, 60-74 and 75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muhlhausler et al 6,524,342 B1.

Muhlhausler et al discloses an implant having a body (30) having a central canal (34) and coupled to an articular surface; a shaft (10) is coupled to the body and the shaft can be removed from the patient after implantation of the prosthesis without removing the body and a locking element (20 or 15).

However, Muhlhausler et al does not disclose the step of creating an access aperture, removing a shaft and replaced it with a second shaft and closing the access aperture.

Regarding the opening and closing of the access aperture, it is an inherent characteristic of insertion of implant within the human body to create an access aperture before the implant is inserted and then closing the same aperture after the implantation is completed.

Regarding the removal of a shaft and replacement of a second shaft, the device is capable of being replaced by a second shaft without removing both the body and the head is required. The specification clearly disclose that the shaft can be loosened during operation in order to adjust the shaft length or the rotation position of the shaft, therefore, if necessary the shaft is capable of being replaced if the shaft is damage, or get loosened in the intramedullary canal or the patient needs a longer shaft.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the steps above for the purpose of replacing an old shaft by a new one.

Regarding claims 42-51; 52-59 & 60-74, Muhlhausler et al does not disclose a plurality of shafts. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a modular implant having a plurality of different shafts in order to select the appropriate shaft for each patient. Additionally, it would have been obvious to one

having ordinary skill in the art at the time the invention was made to have a plurality of different shafts capable of being replaced if the shaft is damaged, or get loosened in the intramedullary canal or the patient needs a longer shaft.

Regarding claims 44, 45, 55 & 63-64, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the threaded connection of the shaft with the body with a Morse taper connection because at the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to modify the threaded connection with the Morse taper connection because Applicant has not disclosed that by having a Morse taper connection provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the threaded connection because it would perform equally as well.

Therefore, it would have been an obvious matter of design choice to modify Muhlhausler et al reference to obtain the invention as specified in claims 44 & 45.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alvin J. Stewart whose telephone number is 571-272-4760. The examiner can normally be reached on Monday-Friday 7:00AM-5:30PM(1 Friday B-week off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Isabella can be reached on 571-272-4749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alvin J Stewart/
Primary Examiner, Art Unit 3774

October 06, 2008.